What Is Claimed Is:

1. A smoke detector having an image sensor (102, 202, 302) and a light source (205, 304),
wherein the image sensor (102, 202, 302) is configured in such a way that the smoke detector records the presence of smoke at a close distance using the image sensor (102, 202, 302), and the light source (205, 304) is controllable in such a way that the light source (205, 304) can be activated when ambient light is insufficient for the image sensor (102, 202, 302).

2. The smoke detector as recited in Claim 1,
wherein the smoke detector is configured in such a way that the smoke detector recognizes the intensity of the ambient light based on a signal from the image sensor (102, 202, 302).

3. The smoke detector as recited in Claim 1,
wherein the smoke detector has an ambient light sensor to measure the intensity of the ambient light.

4. The smoke detector as recited in one of the preceding claims,
wherein the image sensor (102, 202, 302) is configured for monitoring at a distance of 5-20 cm.

5. The smoke detector as recited in one of the preceding claims,
wherein the image sensor (102, 202, 302) is disposed in a labyrinth.

6. The smoke detector as recited in one of the preceding claims,
wherein the light source (205, 304) is a light-emitting diode.

7. The smoke detector as recited in one of the preceding claims,
wherein the smoke detector is mounted flush in a wall (208, 306) or a ceiling.

8. The smoke detector as recited in one of the preceding claims,
wherein the image sensor is configured as a miniature camera.

9. The smoke detector as recited in one of the preceding claims,

wherein the image sensor (102, 202, 302) is attached in such a way that its field of vision points downward or points at an angle toward the side from a detector cover (204, 305).

10. The smoke detector as recited in one of the preceding claims,
wherein an optical system (101, 201, 301) that is focused on a focal point (206) about 10 cm on the cover (204, 305) is provided for the image sensor (102, 202, 302).

11. The smoke detector as recited in one of the preceding claims,
wherein the smoke detector is configured in such a way that the smoke detector uses the image sensor (102, 202, 302) to generate a reference image for subsequent comparisons at specified times.